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NOTICE OF ALLOWANCE AND ISSUE FEE DUE

RECEIVED

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APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
09/059,920	07/22/99	001	NAFF, D	10/09/01
First Named Applicant	GREEN, 35 USC 154(b) term ext. = 0 Days.			

DESCRIPTION OF INVENTION  
CONJUGATED OF AGENTS AND TRANSGLUTAMINASE SUBSTRATE LINKING MOLECULES

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
1	H0535/7009(E	514-100.000	N22 UTILITY	YES	\$620.00	01/09/02

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

Review the SMALL ENTITY status shown above.  
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or  
If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay FEE DUE shown above, or

B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.

All communications regarding this application must give application number and batch number.  
Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

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APPLICATION NUMBER 07/27/01	FILING DATE 07/27/01	FIRST NAMED APPLICANT GREEN	ATTORNEY DOCKET NO. H 00535/7009 (E)
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HM12/1009

EXAMINER NAFF, D
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ART UNIT 1651	PAPER NUMBER 17/E
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DATE MAILED: 10/09/01

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**NOTICE OF ALLOWABILITY**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

- ☒ This communication is responsive to Amendment of 9/24/01
- ☒ The allowed claim(s) is/are 55, 57, 66, 67, 71, 74, 75, 77-81, 83, 84, + 86-112
- ☐ The drawings filed on \_\_\_\_\_ are acceptable.
- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
- ☐ Applicant MUST submit NEW FORMAL DRAWINGS
- ☐ because the originally filed drawings were declared by applicant to be informal.
- ☐ including changes required by the Notice of Draftperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. \_\_\_\_\_
- ☐ including changes required by the proposed drawing correction filed on \_\_\_\_\_, which has been approved by the examiner.
- ☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftperson.

- ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

- ☐ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Notice of Draftperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152
- ☒ Interview Summary, PTO-413
- ☒ Examiner's Amendment/Comment
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Examiner's Statement of Reasons for Allowance

DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 1651

Application Number: 09/359,920  
Art Unit: 1651

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Title, cancel the title and insert the following title --

CONJUGATES OF AGENTS AND TRANSGLUTAMINASE SUBSTRATE LINKING MOLECULES --.

ABSTRACT, cancel the abstract (page 91) and insert the following abstract --

Methods, products, compositions and kits are provided for attaching agents to tissue with a linking molecule in the presence of transglutaminase. The linking molecule and/or agent is a substrate of transglutaminase. The agent can be a nonprotein or an enzyme such as cholinesterase or phosphodiesterase. The transglutaminase may be exogenously added or be endogenous in tissue. In specific embodiments, the agent is not a transglutaminase substrate and the linking molecule is a substrate for transglutaminase containing at least two contiguous linked glutamines or at least three contiguous linked lysines, and may be a polymer. A conjugate of the agent and the linking molecule may be applied to tissue, and in the presence of transglutaminase covalently bonded to the tissue via the linking molecule. A complementary linking molecule rich in lysines may be first attached to the tissue in the presence of transglutaminase, and then covalently bonded to a glutamine-containing linking molecule of the conjugate in the presence of transglutaminase. In another embodiment, a linking molecule containing

multiple glutamines is covalently bonded to tissue in the presence of transglutaminase, and an agent containing multiple lysines is covalently bonded to the linking molecule in the presence of transglutaminase. Alternatively, the linking molecule contains multiple lysines and the agent contains multiple glutamines. Two tissues can be sealed together by holding the tissues in contact with each other in the presence of transglutaminase. --.

In the amendment of 9/24/01, cancel the insertion beginning on page 1, line 7, and replace with --

This application is a continuation-in-part of U.S. Patent Application Serial No. 09/234,358, filed January 20, 1999, now U.S. Patent No. 6,267,957, and which claims benefit of U.S. Provisional Patent Application Serial No. 60/071,908, filed January 20, 1998. This entire reference is incorporated herein. --.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is (703) 308-0520. The examiner can normally be reached on Monday-Thursday and every other Friday from about 8:30 AM to about 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, a message can be left on voice mail.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn, can be reached at telephone number (703) 308-4743.

The fax phone number is (703) 305-3014 or 308-4242

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

DMN  
10/5/01



DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 1651